Generell informasjon

Brønnbane navn	34/7-26 SR
Type	EXPLORATION
Formål	APPRAISAL
Status	PLUGGED
Faktakart i nytt vindu	lenke til kart
Hovedområde	NORTH SEA
Felt	TORDIS
Funn	34/7-21 Borg
Brønn navn	34/7-26
Seismisk lokalisering	
Utvinningstillatelse	089
Boreoperatør	Saga Petroleum ASA
Boretillatelse	902-L2
Boreinnretning	SCARABEO 5
Boredager	26
Borestart	08.01.1998
Boreslutt	02.02.1998
Plugget dato	02.02.1998
Frigitt dato	02.02.2000
Publiseringsdato	28.02.2008
Opprinnelig formål	APPRAISAL
Gjenåpnet	YES
Årsak til gjenåpning	DRILLING/PLUGGING
Innhold	OIL
Funnbrønnbane	NO
1. nivå med hydrokarboner, alder	EARLY CRETACEOUS
1. nivå med hydrokarboner, formasjon.	NO FORMAL NAME
2. nivå med hydrokarboner, alder	LATE JURASSIC
2. nivå med hydrokarboner, formasjon	INTRA DRAUPNE FM SS
Avstand, boredekk - midlere havflate [m]	25.0
Vanndybde ved midlere havflate [m]	201.0
Totalt målt dybde (MD) [m RKB]	4690.0
Totalt vertikalt dybde (TVD) [m RKB]	2658.0
Maks inklinasjon [°]	59
Eldste penetrerte alder	MIDDLE JURASSIC

Eldste penetrerte formasjon	HEATHER FM
Geodetisk datum	ED50
NS grader	61° 16' 29.35'' N
ØV grader	2° 7' 11.74'' E
NS UTM [m]	6793878.10
ØV UTM [m]	452810.97
UTM sone	31
NPDID for brønnbanen	3315

Brønnhistorie

General

Appraisal well 34/7-26 SR is located in the Tampen area in the Northern North Sea. It is a re-entry of well 34/7-26 S, which was suspended when the rig was needed for clean up work on well 34/7-B-2 H. The well had two primary objectives. Firstly, to perform an optimum data collection programme in the Top Draupne sandstone and in lower Shetland Group sands if these were present. Secondly, if there was thick and good quality Top Draupne sands present, the well was to be long-termed tested for six months to the Gullfaks-C Platform.

Operations and results

Well 34/7-26 S was re-entered (34/7-26 SR) on 2 February 1998 through slot J-3 on Tordis Extension Template, approximately 2500 m south of the discovery well 34/7-21. The well was drilled with the semi-submersible installation Scarabeo 5. New Formation was drilled from below the 9 5/8" casing shoe at 4193 m in the primary well bore to final TD at 4690 m (2657.6 m TVD) in Middle Jurassic sediments of the Heather Formation. Inclination dropped from 59 to 20 deg in about 300 m. There were no particular problems with drilling, but the wire line logging programme was cancelled. Probably due to a severe rat hole below the 9 5/8" casing shoe, it was not possible to get any wire line logging tools into the open hole section. The well bore was drilled all through to TD with a pseudo oil based mud (Ancotec with Novamul).

The Top Cromer Knoll Group was penetrated at 4505 m (2480 m TVD), and consisted of the Rødby Formation from 4505 m to 4512 m and the Mime Formation from 4512 to 4528 m (2486 to 2502 m TVD). Two thin sandstones (approx. 1 and 2 m TVD) were encountered within the Mime Formation. The upper sandstone was grey in colour and bioturbated. The sandstone was dated to the Turonian-Coniacian stage. The lower sandstone exhibited a brown colour, and was bioturbated in the lower part. The lower sandstone was dated to the Middle Albian - early Late Albian stage. Both of the sands exhibited fluorescence. From log analysis, the sands exhibited good porosities, but had low permeabilities due to extensive cementation.

The main reservoir interval, the Intra Draupne Formation sand, came in at (4528 m (2502 m TVD), 24 m TVD shallower than prognosed. The gross thickness of the reservoir was approximately 9 m MD, compared to the prognosed thickness of 35 - 40 m. Net/gross ratio in the reservoir was 70%, average porosity 17.6%, average horizontal permeability 54 mD (from core), and average water saturation 39% (values derived from MWD-logs). Total thickness of the underlying Draupne Formation shale section was 75 m TVD. The Intra Draupne Formation reservoir consisted of bedded dark grey to black sandstones in a background of "allochtonous" black shales. Some lenticular bedding was distinguished in the core. The section was none to weakly bioturbated. The sands exhibited fluorescence. Interpreted from the logs, the best part of the reservoir was in the

upper two meters. This section was unfortunately not covered by core.

From the analysis of the logs and the results from the core analysis, it was decided that the criteria for test production were not fulfilled. It was decided to drill a side-track well (34/7-26A) in a position closer to the 34/7-21 well.

No oil water contact was encountered in the well. The deepest oil down-to was observed at approximately 4543 m (2516 m TVD) in the Draupne Formation.

Coring was commenced at 4510 m, 20 m MD above estimated BCU depth. Core #1 jammed after 23 m, and only the upper 10.9 m was recovered. Core #2 started at 4533 m and ended at 4599 m. A total measured thickness of 76.9 m core was recovered. No wire line logs were run and no fluid samples were taken.

The well was plugged back and suspended on 2 February 1998 as an oil appraisal. Since the criteria for a test was not met it was decided side-track well for the test (34/7-26 A), in a position closer to the 34/7-21 well.

Testing

No drill stem test was performed.

Borekaks i Sokkeldirektoratet

Borekaksprøve, topp dybde [m]	Borekaksprøve, bunn dybde [m]
4200.00	4689.00

Borekaks tilgjengelig for prøvetaking?	YES

Borekjerner i Sokkeldirektoratet

Kjerneprøve nummer	Kjerneprøve - topp dybde	Kjerneprøve - bunn dybde	Kjerneprøve dybde - enhet
1	4510.0	4521.0	[m]
2	4534.0	4599.0	[m]

Total kjerneprøve lengde [m]	76.0
Kjerner tilgjengelig for prøvetaking?	YES

Kjernebilder

4510-4515m 4515-4520m 4520-4521m 4533-4538m 4538-4543m


4543-4548m


4548-4553m


4553-4558m


4558-4563m


4563-4568m


4568-4573m


4573-4578m


4578-4583m


4583-4588m


4588-4593m


4593-4598m


4598-4599m

Palynologiske preparater i Sokkeldirektoratet

Prøve dybde	Dybde enhet	Prøve type	Laboratorie
4533.2	[m]	C	GEOCH
4533.5	[m]	C	GEOCH
4533.9	[m]	C	GEOCH
4534.2	[m]	C	GEOCH
4534.6	[m]	C	GEOCH
4535.1	[m]	C	GEOCH
4535.4	[m]	C	GEOCH
4535.8	[m]	C	GEOCH
4536.4	[m]	C	GEOCH
4536.8	[m]	C	GEOCH
4537.5	[m]	C	GEOCH
4537.7	[m]	C	GEOCH
4538.3	[m]	C	GEOCH
4538.8	[m]	C	GEOCH

4539.3	[m]	C	GEOCH
4539.6	[m]	C	GEOCH
4540.5	[m]	C	GEOCH
4541.5	[m]	C	GEOCH
4541.8	[m]	C	GEOCH
4542.3	[m]	C	GEOCH
4543.0	[m]	C	GEOCH
4543.7	[m]	C	GEOCH
4544.2	[m]	C	GEOCH
4548.1	[m]	C	GEOCH
4549.3	[m]	C	GEOCH
4551.5	[m]	C	GEOCH
4552.9	[m]	C	GEOCH
4553.1	[m]	C	GEOCH
4553.1	[m]	C	GEOCH
4554.1	[m]	C	GEOCH
4554.5	[m]	C	GEOCH
4555.1	[m]	C	GEOCH
4555.8	[m]	C	GEOCH
4557.0	[m]	C	GEOCH
4557.8	[m]	C	GEOCH
4558.7	[m]	C	GEOCH
4559.5	[m]	C	GEOCH
4560.5	[m]	C	GEOCH
4561.5	[m]	C	GEOCH
4562.7	[m]	C	GEOCH
4563.8	[m]	C	GEOCH
4564.5	[m]	C	GEOCH
4565.5	[m]	C	GEOCH
4566.2	[m]	C	GEOCH
4567.5	[m]	C	GEOCH
4568.0	[m]	C	GEOCH
4569.2	[m]	C	GEOCH
4571.8	[m]	C	GEOCH
4572.7	[m]	C	GEOCH
4572.8	[m]	C	GEOCH
4573.7	[m]	C	GEOCH
4574.8	[m]	C	GEOCH
4575.6	[m]	C	GEOCH
4576.6	[m]	C	GEOCH

4577.5	[m]	C	GEOCH
4578.3	[m]	C	GEOCH
4579.4	[m]	C	GEOCH
4580.8	[m]	C	GEOCH
4581.6	[m]	C	GEOCH
4582.5	[m]	C	GEOCH
4583.6	[m]	C	GEOCH
4584.7	[m]	C	GEOCH
4585.4	[m]	C	GEOCH
4586.2	[m]	C	GEOCH
4587.5	[m]	C	GEOCH
4588.3	[m]	C	GEOCH
4589.8	[m]	C	GEOCH
4590.8	[m]	C	GEOCH
4591.5	[m]	C	GEOCH
4592.5	[m]	C	GEOCH
4593.3	[m]	C	GEOCH
4594.3	[m]	C	GEOCH
4595.5	[m]	C	GEOCH
4595.7	[m]	C	GEOCH
4596.2	[m]	C	GEOCH
4596.5	[m]	C	GEOCH
4597.1	[m]	C	GEOCH
4597.4	[m]	C	GEOCH
4598.9	[m]	C	GEOCH

Litostratigrafi

Topp Dyb [mMD RKB]	Litostrat. enhet
226	NORDLAND GP
1300	UTSIRA FM
1338	HORDALAND GP
1555	NO FORMAL NAME
1617	NO FORMAL NAME
1665	NO FORMAL NAME
1867	NO FORMAL NAME
1980	NO FORMAL NAME
2098	NO FORMAL NAME
2187	NO FORMAL NAME

2223	NO FORMAL NAME
2896	ROGALAND GP
2896	BALDER FM
3016	LISTA FM
3340	SHETLAND GP
3340	JORSALFARE FM
3866	KYRRE FM
4505	CROMER KNOLL GP
4505	RØDBY FM
4512	MIME FM
4528	VIKING GP
4528	INTRA DRAUPNE FM SS
4537	DRAUPNE FM
4610	HEATHER FM

Geokjemisk informasjon

Dokument navn	Dokument format	Dokument størrelse [KB]
3315_1	pdf	0.18
3315_2	pdf	6.04

Dokumenter - rapportert av utvinningstillatelsen (frigitt ihht til regelverk)

Dokument navn	Dokument format	Dokument størrelse [KB]
3315_34_7_26_SR_COMPLETION_LOG	pdf	2.83
3315_34_7_26_SR_COMPLETION_REPORT	pdf	27.38

Logger

Type logg	Topp dyp for logg [m]	Bunn dyp for logg [m]
MWD - GR RES DIR	4173	4684
MWD - TC SONIC	4173	4684

Foringsrør og formasjonsstyrketester

Type utforing	Utforing diam. [tommer]	Utforing dybde [m]	Brønnbane diam. [tommer]	Brønnbane dyp [m]	LOT/FIT slam eqv. [g/cm3]	Type formasjonstest
INTERM.	9 5/8	4181.0	12 1/4	4183.0	0.00	LOT
OPEN HOLE		4690.0	8 1/2	4690.0	0.00	LOT